

Figure 1A

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GENE	RNA	BAC CLONE	SIZE (BP)	(AA)	POSITION	SNP	GENOME	RNA	PROTEIN	ALLELE FREQUENCY	GENOTYPE FREQUENCY
T2R1	AF227129	NM_01999	AC026787	900	299	48928 - 49827 (-)	rs2234231	CT	128	Pro/Leu (43)	*
SEQ ID NO: 1/2						rs41469	A/G	332	His/Arg (111)	43 : 3 (0.93 : 0.07)	A/A (0) : G/A (3) : G/G (20)
						rs2234232	G/A	422	Cys/Tyr (141)	*	
						rs2234233	CT	616	Arg/Tyr (206)	*	
						rs2234234	CT	675	Ser/Ser (225)	*	
						rs2234235	T/C	850	Leu/I/Leu (284)	*	
T2R3	AF227130	NM_016943	AC004979.1	951	316	17576 - 18526 (+)	NEW	CT	349	Pro/Ser (117)	1
SEQ ID NO: 3/4						rs2270099	CT	807	Gly/Gly (269)	36 : 10 (0.78 : 0.22)	C/C (13) : C/T (10) : T/T (0)
						NEW	CT	852	Leu/Leu (284)	1	
T2R4	AF227131	NM_016944	AC004979.1	900	299	31906 - 31805 (+)	rs2233995	GA	8	Arg/Gln (3)	1
SEQ ID NO: 5/6						rs2233996	GC	9	Arg/Arg (3)	2	
						rs2233997	AC	17	Tyr/Ser (6)	*	
						rs2233998	TC	20	Phe/Ser (7)	31 : 7 (0.82 : 0.12)	T/T (12) : T/C (7) : C/C (0)
						rs2233999	TA	186	Phe/Leu (62)	2 (only R seq)	
						rs2234000	CT	221	Thr/Met (74)	*	
						rs2234001	GC	286	Val/Leu (96)	24 : 22 (0.52 : 0.48)	G/G (6) : G/C (12) : C/C (5)
						rs2234002	GA	512	Ser/Asn (171)	33 : 13 (0.72 : 0.28)	G/G (11) : G/A (11) : A/A (1)
						rs2234003	GA	571	Ile/Val (191)	*	
T2R5	AF227132	NM_018980	AC004979.1	900	299	43779 - 44678 (+)	rs2234013	G/A	58	Gly/Ser (20)	*
SEQ ID NO: 7/8						rs2227264	GT	77	Ser/Ile (26)	28 : 12 (0.7 : 0.3)	G/G (9) : G/T (10) : T/T (1)
						NEW	CT	235	Arg/Cys (79)	1	
						rs2234014	CT	338	Pro/Leu (113)	2 (only R seq)	
						NEW	G/A	363	Arg/Arg (121)	42 : 4 (0.91 : 0.09)	G/G (19) : G/A (4) : A/A (0)
						NEW	G/A	500	Cys/Tyr (167)	42 : 4 (0.91 : 0.09)	G/G (19) : G/A (4) : A/A (0)
						rs2234015	G/A	638	Arg/Gln (213)	42 : 4 (0.91 : 0.09)	G/G (19) : G/A (4) : A/A (0)

Figure 1B

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GENE	RNA	BAC CLONE	SIZE (bp)	(AA)	POSITION	SNP	GENOME	RNA	PROTEIN	ALLEL FREQUENCY	GENOTYPE FREQUENCY
T2R7	AF227133	NM_023919	AC006518.17	957	318	525-1481 (-)	rs2234016	G/T	881	Arg/Leu (294)	1
SEQ ID NO: 9/10						rs3759251	A/T	787	Thr/Ser (263)	*	
						NEW	C/T	788	Thr/Met (263)	43 : 3 (0.93 : 0.07)	C/C (20) : C/T (3) : T/T (0)
						rs3759252	C/A	828	Ile/Ile (276)	*	
						rs619381	G/A	912	Met/Met (304)	*	
T2R8	AF227134	NM_023918	AC006518.17	930	309	4962 - 5391 (-)	NEW	A/G	496	Arg/Gly (166)	2
SEQ ID NO: 11/12						rs1548803	G/A	549	Leu/Leu (183)	40 : 6 (0.87 : 0.13)	G/G (19) : G/A (2) : A/A (2)
						NEW	T/C	829	Tyr/His (277)	1	
						rs2337817	G/A	922	Met/Val (308)	24 : 2 (0.55 : 0.45)	G/G (6) : G/A (12) : A/A (4)
T2R9	AF227135	NM_023917	AC006518.17	939	312	8048 - 8986 (-)	NEW	C/A	201	Phe/Leu (67)	43 : 3 (0.93 : 0.07)
SEQ ID NO: 13/14						NEW	T/A	450	Asp/Glu (150)	41 : 3 (0.93 : 0.07)	C/C (21) : C/A (1) : A/A (1)
						rs3741845	T/C	560	Val/Alu (187)	34 : 10 (0.77 : 0.23)	T/T (19) : T/A (3) : A/A (0)
						NEW	G/T	867	Leu/Phe (289)	1	T/T (15) : T/C (4) : C/C (3)
						NEW	C/A	830	Leu/Met (294)	1	
						rs3944035	C/T	910	Leu/Phe (304)	*	
						rs2159903	C/T	926	Pro/Leu (309)	*	
T2R10	AF227136	NM_023921	AC006518.17	924	307	24257 - 25180 (-)	NEW	A/G	120	Leu/Leu (40)	1
SEQ ID NO: 15/16						rs597468	C/T	467	Thr/Met (156)	10 : 36 (0.22 : 0.78)	C/C (0) : C/T (10) : T/T (13)
						NEW	A/C	521	Lys/Thr (174)	1	
						NEW	A/G	564	Leu/Leu (188)	2	
						NEW	G/A	627	Ser/Ser (209)	35 : 11 (0.76 : 0.24)	G/G (12) : G/A (11) : A/A (0)

Figure 1C

Figure 1D

GENE	RNA	BAC CLONE	SIZE (BP)	AA	POSITION	SNP	GENOME	RNA	PROTEIN	ALLELE FREQUENCY	GENOTYPE FREQUENCY
T2R41 (PTC01)	AF494232	AC072264.5	924	307	27192 - 28115 (+)	rs1404635 NEW NEW	G/A C/T T/A	189 380 584	Thr/Thr (63) Pro/Leu (127) Val/Asp (195)	1 1 1	
T2R43	AF494237	AC018630.40	930	309	48459 - 49388 (+)	NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW	G/C G/A G/C T/G G/T G/A G/A C/G T/G T/C T/C A/G	104 270 460 510 599 635 663 882 883 889	Tyr/Ser (35) Val/Val (90) Arg/Gly (145) Ser/Arg (170) Cys/Phe (200) Arg/His (212) Thr/Thr (221) Phe/Leu (294) Tyr/Arg (295) Met/Val (297)	30 : 4 (0.88 : 0.12) 1 (RC11)	G/G (15) : G/C (0) : C/C (2)
T2R44	AF494228	AC018630.40	930	309	109353 - 110282 (+)	NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW NEW	C/T T/C T/A G/A C/G C/T G/A T/G A/G C/G G/A	103 423 484 599 649 680 718 744 827 843	Arg/Tyr (35) Ala/Ala (141) Met/Leu (162) Cys/Tyr (200) Gln/Glu (217) Ala/Val (227) Val/Ile (240) Ser/Ser (248) Pro/Arg (276) Trp/* (281)	38 : 6 (0.84 : 0.14) 5 : 39 (0.11 : 0.89) 34 : 10 (0.11 : 0.23) 2 1 8 : 38 (0.11 : 0.83) 7 : 39 (0.43 : 0.67) 3 : 43 (0.07 : 0.93) 1	C/C (18) : CT (2) : TT (2) TT (18) : TC (3) : C/C (1) TT (15) : TA (4) : A/A (2) C/C (17) : CT (4) : TT (2) G/G (18) : G/A (3) : A/A (2) A/A (0) : G/A (3) : G/G (20)
T2R45	AF494266		900	299	?					1 (RC11)	

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SEQ ID NO: 33734

Figure 1E

GENE	RNA	BAC CLONE	SIZE (BP)	(AA)	POSITION	SNP	GENOME	RNA	PROTEIN	ALLELE FREQUENCY	GENOTYPE FREQUENCY
T2R46	AF494227	AC018630.40	900 (930)	299 (309)	78394 - 79323 (+)	NEW NEW NEW NEW	T/G T/A G/A CT	106 692 749 892	Phe/Val (36) Leu/Met (228) Trp/* (250) Glu/* (288)	43 : 3 (0.93 : 0.07) 39 : 7 (0.85 : 0.15) 40 : 6 (0.87 : 0.13) 1 (RC11)	TT (20) : T/G (3) : GG (0) TT (18) : T/A (3) : AA (2) GG (18) : G/A (4) : AA (1)
T2R47	AF494233	AC018630.40	980	319	6444 - 7403 (+)	rs2597925 rs2597924 rs1669405 rs259904	GA GA TG TG	934 920 842 756	Gly/Gly (314) Arg/His (307) Leu/Trp (281) Phe/Leu (232)	?	?
	SEQ ID NO: 37/38										
T2R48	AF494234	AC018630.40	900	299	118117 - 119016 (+)	rs1868769	CT GA AC TC AT AG TC TC AT AG TC TC TC TC CT	84 94 326 418 456 673 719 799 885 895	Ala/Ala (28) Val/Ile (32) Lys/Thr (109) Leu/Ile (140) Arg/Ser (152) Ile/Val (225) Ile/Thr (240) Val/Leu (267) Trp/* (295) Arg/Cys (299)	38 : 8 (0.83 : 0.17) 33 : 13 (0.72 : 0.28) 1 12 : 34 (0.26 : 0.74) 1 1 1 1 1 38 : 8 (0.83 : 0.17)	C/C (17) : CT (4) : TT (2) G/G (12) : G/A (9) : AA (2) TT (4) : TC (4) : CC (15)
	SEQ ID NO: 39/40										
T2R49	AF494236	AC018630.40	930	309	142813 - 143742 (+)		A/G CT GA CA C/A GA AG	156 261 421 429 442 516 706	Ala/Ala (52) Ala/Ala (87) Val/Ile (141) His/Gln (143) His/Asn (148) Met/Ile (172) Ile/Val (236)	6 : 32 (0.16 : 0.84) 32 : 6 (0.84 : 0.16) 35 : 3 (0.92 : 0.08) 32 : 6 (0.84 : 0.16) 29 : 9 (0.76 : 0.24) 1	A/A (15) : A/G (2) : G/G (2) C/C (15) : CT (2) : TT (2) G/G (16) : G/A (3) : AA (0) C/C (15) : CA (2) : AA (2) C/C (15) : CA (5) : AA (2) 6 : 32 (0.16 : 0.84)

Figure 1 F

GENE	RNA	BAC CLONE	SIZE (BP)	(AA)	POSITION	SNP	GENOME	RNA	PROTEIN	ALLELE FREQUENCY	GENOTYPE FREQUENCY
							NEW	T/C	755 Phe/Ser (252)	32 : 6 (0.84 : 0.16)	TT (15) : T/C (2) : CC (2)
							NEW	G/T	764 Arg/Leu (255)	32 : 6 (0.84 : 0.16)	G/G (15) : G/T (2) : TT (2)
							NEW	A/G	808 Ile/Val (270)	2	
T2R50	AF494235	AC018630.40	900	299	153828 - 154727 (+)	rs1376251	G/A	608	Tyr/Cys (203)	?	
	SEQ ID NO: 43/44										
T2R60	AY114094	NM_177437	AC092214.3	957	318 62817 - 63773 (+)		NEW	A/T	595 Met/Leu (199)	3 : 31 (0.09 : 0.91)	A/A (13) : A/T (3) : T/T (0)
	SEQ ID NO: 45/46						NEW	C/T	930 Arg/Arg (310)	24 : 22 (0.52 : 0.48)	C/C (7) : C/T (8) : T/T (8)

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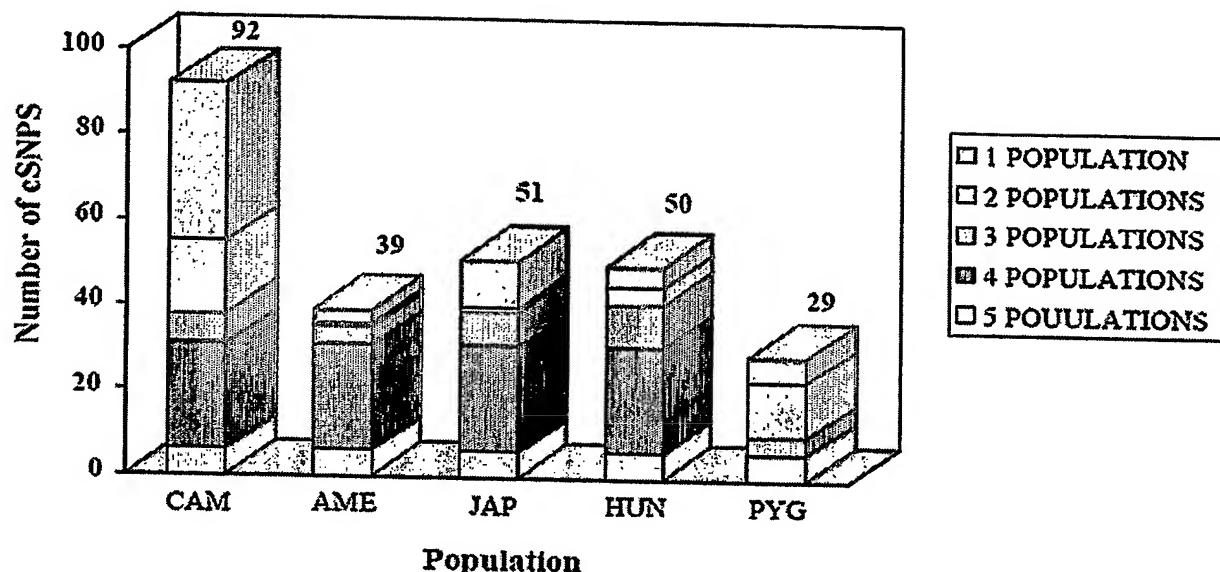
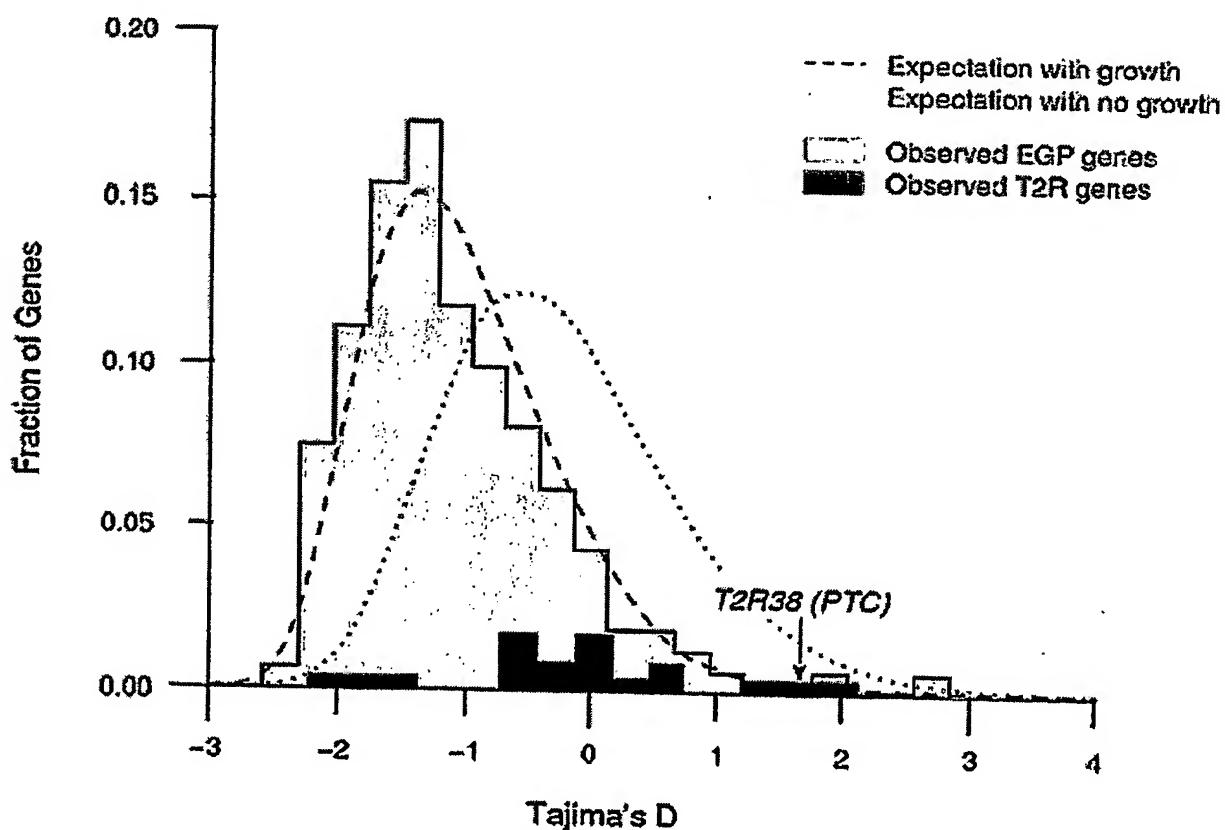
FIGURE 2**FIGURE 3**

FIGURE 4

